



June 30, 2015

Dr. Shridhar Bhat
6331 River Road
Richmond, VA 23229



RE: Tanglewood Home For Adults WWTP Permit Application
VPDES # VA0090646

Dear Dr. Bhat:

Enclosed please find the completed permit application for the above referenced facility. Please review the application and sign where indicated. Once signed, the complete permit package must be mailed to:

DEQ – BRRO
Attn: Becky France
3019 Peters Creek Road
Roanoke, VA 24019-2738.

If you have any questions or comments, I can be reached at (540) 862-5138 or by email:
brianw-ess@lumos.net

Sincerely,

A handwritten signature in black ink, appearing to read "B. White".

Brian White
Project Manager
Environmental Services Division

Enclosure

Mrs. Becky France
Department of Environmental Quality
Blue Ridge Regional Office
3019 Suite C, Peters Creek Road
Roanoke, VA 24019

Date: June 23, 2015

Subject: VPDES # VA0090646 Permit Renewal
Request for Waiver – PCB Monitoring



Dear Mrs. France,

I would like to request an Exception for PCB testing at the Tanglewood Home for Adults WWTP. Due to the facility size and location I do not believe this testing is necessary.

The treatment plant was built in 2003 to serve an assisted living facility. Prior to being an assisted living facility the property was a motel. To my knowledge, no industrial activity has occurred on the property, nor is any anticipated in the future. As such, there is not a likely source of PCB's to justify the expense of testing for a contaminant that is not likely to be present.

Thank you for your assistance in this matter.

Sincerely,

Dr. Shridhar Bhat

FORM
2A
NPDES**NPDES FORM 2A APPLICATION OVERVIEW****APPLICATION OVERVIEW**

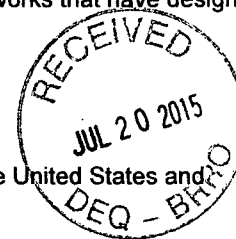
Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. Additional Application Information for Applicants with a Design Flow \geq 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
1. Has a design flow rate greater than or equal to 1 mgd,
 2. Is required to have a pretreatment program (or has one in place), or
 3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
1. Has a design flow rate greater than or equal to 1 mgd,
 2. Is required to have a pretreatment program (or has one in place), or
 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

**ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)**

Tanglewood Home for Adults WWTP

BASIC APPLICATION INFORMATION**PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:**

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name Tanglewood Home for Adults WWTP

Mailing Address P.O. Box 808
Covington, VA 24426

Contact person Ms Nancy Jordan

Title Administrator

Telephone number (540) 962-4967

Facility Address 4401 Midland Trail
(not P.O. Box) Covington, VA 24426

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name Environmental Systems Service, Ltd

Mailing Address 218 N. Main Street
Culpeper, VA 22701

Contact person Mr. Brian White

Title Project Manager

Telephone number (540) 862-2503

Is the applicant the owner or operator (or both) of the treatment works?

☐ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☒ facility ☒ applicant**A.3. Existing Environmental Permits.** Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0090646 PSD _____

UIC _____ Other _____

RCRA _____ Other _____

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>Tanglewood Adult Home</u>	<u>150</u>	<u>Separate</u>	<u>Private</u>
_____	_____	_____	_____
_____	_____	_____	_____
Total population served	<u>150</u>		

Tanglewood Home for Adults VA0090646

A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No**A.6. Flow.** Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 0.018
- mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	<u>0.004</u>	<u>0.004</u>	<u>0.004</u>	mgd
c. Maximum daily flow rate	<u>0.013</u>	<u>.013</u>	<u>0.013</u>	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer 100 %

☐ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?
- ☒
- Yes
- ☐
- No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1

ii. Discharges of untreated or partially treated effluent _____

iii. Combined sewer overflow points _____

iv. Constructed emergency overflows (prior to the headworks) _____

v. Other _____

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?
- ☐
- Yes
- ☒
- No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

- c. Does the treatment works land-apply treated wastewater?
- ☐
- Yes
- ☒
- No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?
- ☐
- Yes
- ☒
- No

Tanglewood Home for Adults VA0090646

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge.

Provide the average daily flow rate from the treatment works into the receiving facility.

_____ mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

_____ Yes X No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Tanglewood Home for Adults VA0090646

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

- a. Outfall number 001
- b. Location Covington 24426
(City or town, if applicable) (Zip Code)
Alleghany VA
(County) (State)
37 deg. 48 min. 49 sec. 80 deg. 5 min. 27 sec.
(Latitude) (Longitude)
- c. Distance from shore (if applicable) N/A ft.
- d. Depth below surface (if applicable) N/A ft.
- e. Average daily flow rate 0.004 mgd
- f. Does this outfall have either an intermittent or a periodic discharge?
_____ Yes X No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: _____
- Average duration of each discharge: _____
- Average flow per discharge: _____ mgd
- Months in which discharge occurs: _____
- g. Is outfall equipped with a diffuser? _____ Yes X No

A.10. Description of Receiving Waters.

- a. Name of receiving water Ogle Creek
- b. Name of watershed (if known) Unknown
- United States Soil Conservation Service 14-digit watershed code (if known): Unknown
- c. Name of State Management/River Basin (if known): James River (Upper)
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): Unknown
- d. Critical low flow of receiving stream (if applicable): N/A
acute _____ cfs chronic _____ cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): N/A mg/l of CaCO₃

Tanglewood Home for Adults VA0090646

A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☐ Primary ☐ Secondary
☒ Advanced ☐ Other. Describe: _____

- b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal > 90 %
 Design SS removal > 90 %
 Design P removal 25 %
 Design N removal 70 %
 Other _____ %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?

☒ Yes ☐ No

- d. Does the treatment plant have post aeration?

☒ Yes ☐ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.1	s.u.			
pH (Maximum)	7.8	s.u.			
Flow Rate	0.014	MGD	0.004	MGD	365
Temperature (Winter)	8.2	Celsius	12.0	Celsius	90
Temperature (Summer)	28.3	Celsius	23.9	Celsius	92

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	N/A						
	CBOD-5	9.0	mg/L	1.0	mg/L	43	SW5210	2 mg/L1
FECAL COLIFORM (E. COLI.)		2420	n/100ml	3.4	n/100ml	172	SM9221E	2n/100 mL
TOTAL SUSPENDED SOLIDS (TSS)		29	mg/L	5.1	mg/L	43	SW2540	1 mg/L

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Tanglewood Home for Adults VA0090646

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ X

Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)

☐ Part E (Toxicity Testing: Biomonitoring Data)

☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

☐ Part G (Combined Sewer Systems)

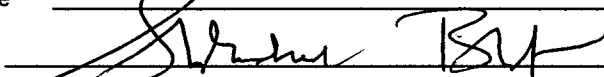
ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title

Dr. Shridhar Bhat— Owner

Signature



Telephone number

(804) 421-7991

Date signed

07/14/2015

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Will this facility generate sewage sludge? ☒ Yes ☐ No

Will this facility derive a material from sewage sludge? ☐ Yes ☒ No

If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Will this facility apply sewage sludge to the land? ☐ Yes ☒ No

Will sewage sludge from this facility be applied to the land? ☐ Yes ☒ No

If you answered No to both questions above, skip Section C.

If you answered Yes to either, answer the following three questions:

a. Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?

☐ Yes ☒ No

b. Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for application to the land? ☐ Yes ☒ No

c. Will sewage sludge from this facility be sent to another facility for treatment or blending? ☒ Yes ☐ No

If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? ☐ Yes ☒ No

If Yes, complete Section D (Surface Disposal).



SECTION A. GENERAL INFORMATION

All applicants must complete this section.

1. Facility Information.

- a. Facility name: Tanglewood Home for Adults WWTP
- b. Contact person: Nancy Jordan
Title: Administrator
Phone: (540) 962-4967
- c. Mailing address:
Street or P.O. Box: P.O. Box 808
City or Town: Covington State: VA Zip: 24426
- d. Facility location:
Street or Route #: 4401 Midland Trail
County: Alleghany
City or Town: Covington State: VA Zip: 24426
- e. Is this facility a Class I sludge management facility? ☐ Yes ☒ No
- f. Facility design flow rate: 0.018 mgd
- g. Total population served: Approx 50
- h. Indicate the type of facility:
☐ Publicly owned treatment works (POTW)
☒ Privately owned treatment works
☐ Federally owned treatment works
☐ Blending or treatment operation
☐ Surface disposal site
☐ Other (describe): _____

2. Applicant Information. If the applicant is different from the above, provide the following:

- a. Applicant name: Environmental Systems Service, LTD
- b. Mailing address:
Street or P.O. Box: P.O. Box 520
City or Town: Culpeper State: VA Zip: 22701
- c. Contact person: Brian White
Title: Plant Manager

Phone: (540) 862-5138
- d. Is the applicant the owner or operator (or both) of this facility?
☐ owner ☒ operator
- e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)
☐ facility ☒ applicant

3. Permit Information.

- a. Facility's VPDES permit number (if applicable): VA0090646
- b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:
Permit Number: N/A Type of Permit: _____

4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? ☐ Yes ☒ No If yes, describe:

5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:
- Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
 - Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries. ATTACHMENT ONE
6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction. ATTACHMENT TWO
7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? ☒ Yes ☐ No
If yes, provide the following for each contractor (attach additional pages if necessary).
Name: Hamilton Septic Service
Mailing address: _____
Street or P.O. Box: 16 Buckskin Lane
City or Town: Buena Vista State: VA Zip: 24416
Phone: (800) 671-6051
Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge: SH-2-181
If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).
8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old. N/A

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic				
Cadmium				
Chromium				
Copper				
Lead				
Mercury				
Molybdenum				
Nickel				
Selenium				
Zinc				

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:
- ☒ Section A (General Information)
☒ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)
☐ Section C (Land Application of Bulk Sewage Sludge)
☐ Section D (Surface Disposal)

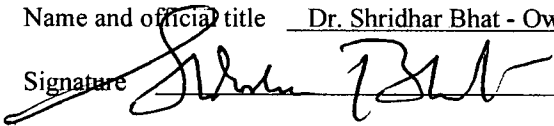
FACILITY NAME: Tanglewood Home for Adults WWTP

VPDES PERMIT NUMBER: VA0090646

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Dr. Shridhar Bhat - Owner

Signature



Date Signed

07/14/2015

Telephone number (804) 421-7991

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

**SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE**

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.
Total dry metric tons per 365-day period generated at your facility: 0.56 dry metric tons
2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
 - a. Facility name: N/A
 - b. Contact Person: _____
Title: _____
Phone () _____
 - c. Mailing address:
Street or P.O. Box: _____
City or Town: _____ State: _____ Zip: _____
 - d. Facility Address: _____
(not P.O. Box) _____
 - e. Total dry metric tons per 365-day period received from this facility: _____ dry metric tons
 - f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:

3. Treatment Provided at Your Facility.
 - a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
Class A Class B X Neither or unknown
 - b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Aerobic Digestion
 - c. Which vector attraction reduction option is met for the sewage sludge at your facility?
Option 1 (Minimum 38 percent reduction in volatile solids)
Option 2 (Anaerobic process, with bench-scale demonstration)
Option 3 (Aerobic process, with bench-scale demonstration)
Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
Option 5 (Aerobic processes plus raised temperature)
Option 6 (Raise pH to 12 and retain at 11.5)
Option 7 (75 percent solids with no unstabilized solids)
Option 8 (90 percent solids with unstabilized solids)
X None or unknown
 - d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: Aerobic Digestion
 - e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: N/A
4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge). N/A
(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
 - a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
_____ dry metric tons
 - b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?

Yes No

5. Sale or Give-Away in a Bag or Other Container for Application to the Land. N/A

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending.

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

- a. Receiving facility name: Covington Wastewater Treatment Plant
- b. Facility contact: George Jamison
Title: Chief Operator
Phone: (540) 965-6328
- c. Mailing address:
Street or P.O. Box: 333 W. Locust Street
City or Town: Covington State: VA Zip: 24426
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: 0.56 dry metric tons
- e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:

Permit Number:
VA0025542

Type of Permit:
VPDES

- f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? X Yes No

Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?

 Class A Class B X Neither or unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge: Anaerobic Digestion

- g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? X Yes No

Which vector attraction reduction option is met for the sewage sludge at the receiving facility?

- Option 1 (Minimum 38 percent reduction in volatile solids)
 Option 2 (Anaerobic process, with bench-scale demonstration)
 Option 3 (Aerobic process, with bench-scale demonstration)
 Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
 Option 5 (Aerobic processes plus raised temperature)
 Option 6 (Raise pH to 12 and retain at 11.5)
 Option 7 (75 percent solids with no unstabilized solids)
 Option 8 (90 percent solids with unstabilized solids)
X None unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge: Anaerobic Digestion

- h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?

 Yes X No

If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:

- i. If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility

- j Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? ☐ Yes ☒ No
If yes, provide a copy of all labels or notices that accompany the product being sold or given away.
- k Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? ☒ Yes ☐ No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.
Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported. ATTACHMENT FOUR
- _____
- _____

7. Land Application of Bulk Sewage Sludge. N/A

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: _____ dry metric tons
- b. Do you identify all land application sites in Section C of this application? ☐ Yes ☐ No
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
- c. Are any land application sites located in States other than Virginia? ☐ Yes ☐ No
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.
- _____
- _____
- d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

8. Surface Disposal.

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.) N/A

- a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: _____ dry metric tons
- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
☐ Yes ☐ No
If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.
- c. Site name or number: _____
- d. Contact person: _____
Title: _____
Phone: () _____
Contact is: ☐ Site Owner ☐ Site operator
- e. Mailing address.
Street or P.O. Box: _____
City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons
- g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:
Permit Number: _____ Type of Permit: _____

9. Incineration. N/A

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: _____ dry metric tons
- b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
___ Yes ___ No
If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.
- c. Incinerator name or number: _____
- d. Contact person: _____
Title: _____
Phone: () _____
Contact is: ___ Incinerator Owner ___ Incinerator Operator
- e. Mailing address.
Street or P.O. Box: _____
City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons
- g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing of sewage sludge at this incinerator:
Permit Number: _____ Type of Permit: _____

10. Disposal in a Municipal Solid Waste Landfill. N/A

(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

- a. Landfill name: _____
- b. Contact person: _____
Title: _____
Phone: () _____
Contact is: ___ Landfill Owner ___ Landfill Operator
- c. Mailing address.
Street or P.O. Box: _____
City or Town: _____ State: _____ Zip: _____
- d. Landfill location.
Street or Route #: _____
County: _____
City or Town: _____ State: _____ Zip: _____
- e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:
_____ dry metric tons
- f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:
Permit Number: _____ Type of Permit: _____

- g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?
___ Yes ___ No
- h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? ___ Yes ___ No
- i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill be watertight and covered? ___ Yes ___ No
Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported. _____

VPDES PERMIT APPLICATION ADDENDUM - SUPPLEMENTARY INFORMATION

A. General Information

1. Entity to whom the permit is to be issued: Dr. Shridhar Bhat
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
2. Classify the discharge as one of the following by checking the appropriate line:
☒ a. Existing discharge
☐ b. Proposed discharge
☐ c. Proposed expansion of an existing discharge
3. Year the current wastewater treatment facility began operation: 2003
4. Provide NAICS Code (Industrial Only) _____



B. Location

1. Is this facility located within city or town boundaries? Y / N NO
2. (New Issuances & Modifications Only) What is the tax map parcel number for the land where this facility is located? N/A
3. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? None
4. Attach to the back of this application a location map(s) which may be traced from or is/are a production of a U.S. Geological Survey topographic quadrangle(s) or other appropriately scaled contour map(s). The location map(s) shall show the following:
 - a. Treatment Plant
 - b. Discharge point
 - c. Receiving waters
 - d. Boundaries of the property on which the treatment plant is located, or to be located.
 - e. Distance from the treatment plant to the nearest: (Indicate "not applicable" for any distance greater than 2000 feet)
 - i. Residence
 - ii. Distribution line for potable water supply
 - iii. Reservoir, well, or other source of water supply
 - iv. Recreational area
 - f. Distance from the discharge point to the nearest: (Indicate "not applicable" for any distance greater than 15 miles)
 - i. Downstream community
 - ii. Upstream and downstream water intake points
 - iii. Shellfishing waters
 - iv. Wetlands area
 - v. Downstream impoundment
 - vi. Downstream recreational area

C. Discharge Description

1. Provide a brief description of the wastewater treatment scheme. Also, attach to this application, a process flow diagram showing each process unit of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system.

The Treatment System is an Activated Sludge System which uses a Biowheel for mixing and aeration of the aeration tank. Following the aeration tank, mixed liquor flows into a clarifier, where solids are settled and either returned to the aeration tank or 'wasted' to the sludge holding tank. From the clarifier, treated water flows into the final holding tank which acts as a wet-well for the effluent pump. The effluent pump is controlled by floats in the final holding tank. Treated wastewater is pumped from the holding tank, through a chlorine contact tank pipe and then to the receiving stream. Sodium hypochlorite solution is injected in the discharge line prior to the contact tank, and sodium bisulfite solution is injected in the discharge line after the contact tank.

2. What is the design average flow of this facility? 0.018 MGD
Industrial facilities: What is the max. 30-day avg. production level (include units)? 0.007MGD
3. In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y / N NO

If "Yes", please specify the other flow tiers (in MGD) or production levels: _____
Please consider: Is your facility's design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

4. Nature of operations generating wastewater: Domestic sewage from an assisted living facility

100 % of flow from domestic connections/sources

Number of private residences to be served by the wastewater treatment facilities:

0 X 1-49 50 or more

0 % of flow from non-domestic connections/sources

5. Mode of discharge: Continuous X Intermittent Seasonal
Describe frequency and duration of intermittent or seasonal discharges: Discharges are intermittent at a rate of 10-15 gpm. The duration of discharge is approximately 10-12 minutes per discharge depending on Influent flow

6. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:

Permanent stream, never dry

X Intermittent stream, usually flowing, sometimes dry

Ephemeral stream, wet-weather flow, often dry

Effluent-dependent stream, usually or always dry

Lake or pond at or below the discharge point

Other:

E. Anticipated Phasing Schedule for Plant Capacity - Proposed / Expanding Discharges

If this application is for a proposed or expanded discharge(s), complete the phasing schedule below beginning with the year in which construction completion is anticipated and progressing in increments of 5 years for 30 years thereafter.

Proposed Design Capacity: _____ MGD

Anticipated Date of Construction Completion: _____
Month Year

Years after Completion	Projected Flow (MGD)
0	
5	
10	
15	
20	
25	
30	

F. Interim Facilities

Are the wastewater treatment facilities interim? (designed for a useful life of less than 5 years)
_____ Yes ___X___ No

If so, provide the estimated date to be discontinued (month, year) _____, and the name and location of the intended replacement facility.

Name / Location

G. Privately Owned Treatment Works

If this application is for a privately owned treatment works serving, or designed to serve, 50 or more residences, you must include with your application notification from the State Corporation Commission that you are incorporated in the Commonwealth AND verification from the SCC that you are in compliance with all regulations and relevant orders of the State Corporation Commission. Incorporated also includes Limited Liability Companies (LLCs), Limited Partnerships (LPs) and certificates of authority.

H. Consent to Receive Electronic Mail

The Department of Environmental Quality (DEQ) may deliver permits and certifications (this includes permit issuances, reissuances, modifications, revocation and reissuances, terminations and denials) to recipients, including applicants or permittees, by electronically certified mail where the recipients notify DEQ of their consent to receive mail electronically (§ 10.1-1183). Check *only one* of the following to consent to or decline receipt of electronic mail from DEQ as follows:

- ☒ Applicant or permittee agrees to receive by electronic mail the permit that may be issued for the proposed pollutant management activity, and to certify receipt of such electronic mail when requested by the DEQ.
- ☐ Applicant or permittee declines to receive by electronic mail the permit associated with the permit that may be issued for the proposed pollutant management activity.



Satellite Sewer System Owner Listing Form

OWNER INFORMATION

Owner Name: Dr. Shridhar Bhat - Owner

Address: 6331 River Road

City, State, Zip Richmond, VA 23229

Phone, email (804) 421-7991 bhatnph@gmail.com

EMERGENCY INFORMATION (if different from above)

Name Brian White

Company ESS, Ltd.

Phone, Cell, Pager 540 691-4410

SYSTEM DESCRIPTION

System name: Tanglewood Home for Adults WWTP

System Description (e.g. pump station, pretreatment, location, type of facilities served (apartments, neighborhood, industrial facility, town, sewer district).

Pump station and treatment facility serving an assisted living facility